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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,069	09/28/2000	Kenneth W. Batcher	72255/02663	2842

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EXAMINER

LIPMAN, JACOB

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/675,069

Applicant(s)

BATCHER, KENNETH W.

Examiner

Jacob Lipman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 25-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-3 and 45-50 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-3, drawn to a method of encrypting and decrypting where one key is loaded while another is read, classified in class 380, subclass 261.
  - II. Claims 25-44, drawn to loading a key and reading it before it's completely loaded, classified in class 380, subclass 43.
  - III. Claims 45-50, drawn to key loading and reading in a dual-ported memory, classified in class 380, subclass 286.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I, II, and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as it does not need dual ported memory, and includes 2 different keys.

Invention II has separate utility such as it does not need dual ported memory, and includes only 1 key. Invention III has separate utility such as the loading starts before the reading finishes, and includes 2 different keys See MPEP § 806.05(d).

3. Because these inventions are distinct for the reasons given above and the search required for each group is not required for each other group, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Larry B. Donovan on 3/15/05 a provisional election was made without traverse to prosecute the invention of II, claims 25-44.

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Affirmation of this election must be made by applicant in replying to this Office action.

Claims 1-3 and 45-50 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 25-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaser et al., US Patent number 5,793,980, in view of applicant's admitted prior art.

With regard to claims 25-27, 30-32, 35-37, and 40-42, applicant admits in the background of the invention that, "the RC4 algorithm can be divided into three basic phases: phase 1 for lookup of a private key; phase 2 having two parts, namely, phase 2a for filling an S-box table linearly and phase 2b for initializing the S-box table with the private key; and phase 3 for the encrypting/decrypting operation." The admitted prior art does not disclose loading and reading the keys simultaneously. Glaser discloses a well-known streaming data system in reference to audio (column 25 lines 1-29). The audio is loaded and read, including being decompressed (column 27 lines 30-45), simultaneously. Glaser further discloses providing a map as a table of contents for the audio (column 25 lines 30-56). It would have been obvious for one of ordinary skill in the art to use Glaser's streaming data memory allocation system for the RC4 decryption

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and encryption methods, for the motivation of achieving closer to real time decryption and encryption.

With regard to claims 28, 29, 33, 34, 38, 39, 43, and 44 applicant admits that is well known in RC4 to scramble the table (page 3).


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Lipman whose telephone number is 571-272-3738. The examiner can normally be reached on 7:00 - 4:00 (M-Th).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571-272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JL

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
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